CLAIMS

1. An organic EL light emitting device comprising an organic EL light emitting layer and an electrode for applying a voltage to the organic EL light emitting layer, wherein the organic EL light emitting layer includes a hyperbranched polymer layer having hyperbranched macromolecules uniaxially aligned with a degree of alignment of 0.95 or more and emits polarized light.

2. The organic EL light emitting device of claim 1, wherein the hyperbranched polymer layer includes self-organized disc-shaped hyperbranched macromolecules.

3. The organic EL light emitting device of claim 1, wherein the hyperbranched polymer layer includes self-organized rod-shaped hyperbranched macromolecules.

4. The organic EL light emitting device of any one of claims 1 to 3, wherein the hyperbranched macromolecules include dendrimers.

5. The organic EL light emitting device of any one of claims 1 to 4, wherein the hyperbranched macromolecules

are self-organized by electrostatic interaction.

6. The organic EL light emitting device of any one of claims 1 to 4, wherein the hyperbranched macromolecules are self-organized by hydrogen bonding.

7. The organic EL light emitting device of any one of claims 1 to 6, further comprising a wall structure having a side face roughly perpendicular to a surface of the hyperbranched polymer layer, wherein the hyperbranched macromolecules are aligned roughly in parallel with the side face by interaction with the wall structure.

8. The organic EL light emitting device of claim 7, wherein the side face of the wall structure is charged, and the hyperbranched macromolecules electrostatically interact with the side face.

9. The organic EL light emitting device of claim 7, wherein the side face of the wall structure has a hydrogen-bonding property, and the hyperbranched macromolecules hydrogen-bond with the side face.

10. The organic EL light emitting device of any one of claims 1 to 9, wherein the hyperbranched polymer layer includes a first hyperbranched polymer layer functioning as an electron transport layer or a hole transport layer and a second hyperbranched polymer layer functioning as at least a light emitting layer.

11. A liquid crystal display comprising the organic EL light emitting device of any one of claims 1 to 10 and a liquid crystal panel receiving polarized light emitted from the organic EL light emitting device and controlling the transmittance of the polarized light.

12. The liquid crystal display of claim 11, wherein the organic EL light emitting device includes a wall structure having a side face roughly perpendicular to a surface of the hyperbranched polymer layer, the hyperbranched macromolecules being aligned roughly in parallel with the side face by interaction with the wall structure,

the liquid crystal panel has a plurality of pixels and a black matrix shading spaces between the plurality of pixels, and

the wall structure of the organic EL light emitting

device is formed to correspond to the black matrix of the liquid crystal panel.

13. A method for fabricating an organic EL light emitting device having an organic EL light emitting layer and an electrode for applying a voltage to the organic EL light emitting layer, the organic EL light emitting device emitting polarized light, the method comprising the steps of:

(a) preparing a substrate having an electrode formed on its principal plane;

(b) forming a wall structure on the principal plane, the wall structure having a side face roughly perpendicular to the principal plane; and

(c) providing a material including hyperbranched macromolecules on the principal plane to form the organic EL light emitting layer including a hyperbranched polymer layer having the hyperbranched macromolecules aligned roughly in parallel with the side face.

14. The method of claim 13, wherein the step (b) comprises the step of charging the side face, and the hyperbranched macromolecules are aligned roughly in parallel

with the side face by electrostatic interaction with the side face.

15. The method of claim 14, further comprising the step of providing a material including other hyperbranched macromolecules electrostatically interacting with the previous hyperbranched macromolecules.

16. The method of claim 13, wherein the step (b) comprises the step of imparting a hydrogen-bonding property to the side wall, and the hyperbranched macromolecules are aligned roughly in parallel with the side wall by hydrogen bonding with the side face.

17. The method of claim 16, further comprising the step of providing a material including other hyperbranched macromolecules hydrogen-bonding with the previous hyperbranched macromolecules.